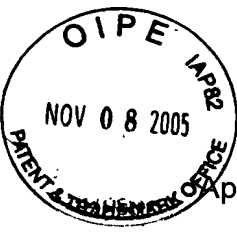501.43611X00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: T. KISHIMOTO, et al

Serial No.:   10/790,837

Filed: March 3, 2004

For: STORAGE MANAGING METHOD AND ITS DEVICE

SUPPLEMENTAL PETITION TO MAKE SPECIAL
UNDER 37 CFR §1.102(MPEP §708.02)

MS Petition
Commissioner for Patents   November 8, 2005
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants hereby provide a Supplemental Petition to its Petition filed on May 31, 2005 requesting that the Commissioner make the above-identified application special in accordance with 37 CFR §1.102(d). Pursuant to MPEP §708.02(VIII), Applicants state the following.

(A)   This Petition is accompanied by the fee set forth in 37 CFR §1.17(h).

The Commissioner is hereby authorized to charge any additional payment due, or to credit any overpayment, to Deposit Account No. 50-1417.

(B) All claims are directed to a single invention.

If the Office determines that all claims are not directed to a single invention, Applicant will make an election without traverse as a prerequisite to the grant of special status.

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(C) A pre-examination search has been conducted.

The search was directed towards a storage system. In particular, the search was directed towards a processing method and storage management system for use in the operation of a storage managing server connected to a storage device and a storage managing terminal.

According to the present invention, the storage managing terminal performs transmission processing for sending a first request to the storage managing server and a second request for executing processing including the communication of constructional information of the storage device by the storage managing server between the storage device and the storage managing server. The storage managing server performs first processing executed in response to the first request from the storage managing terminal and second processing, which is executed in response to the second request from the storage managing terminal and includes the communication of the constructional information of the storage device, between the storage device and the storage managing server. According to the present invention, the second processing with respect to the second request from the storage managing terminal is started in accordance with the first processing with respect to the first request from the storage managing terminal before the storage managing server makes the response to the storage managing terminal.

The search of the above features was conducted in the following areas: Class 709, subclasses 223, 224, 225, 226.

Additionally, a computer database search was conducted on the USPTO systems EAST and WEST.

(D) The following is a list of the references deemed most closely related to the subject matter encompassed by the claims:

U.S. Patent Number	Inventors
5,392,398	Meyer
6,640,278	Nolan et al
6,772,209	Chernock et al

U.S. Patent Application Publication No.	Inventor(s)
2002/0161880	Kishimoto et al
2003/0115347	Wolrich et al
2003/0167327	Baldwin et al
2003/0229645	Mogi et al
2004/0078461	Bendich et al
2004/0078583	Kishimoto et al
2004/0128363	Yamagami et al

A copy of each of these references (as well as other references uncovered during the search) was enclosed with the May 31, 2005 IDS.

(E) It is submitted that the present invention is patentable over the references for the following reasons.

It is submitted that the cited references, whether considered alone or in combination, fail to teach or suggest the invention as claimed. In particular, the cited references, at a minimum, fail to teach or suggest features as recited in the claims of:

a first feature of the present invention as recited in independent claim 1, wherein the storage managing server receives a first request issued from said storage managing terminal for executing the processing of the storage managing server, and a second request for executing processing including the communication of constructional information of said storage device between said storage device and the storage managing server,

a second feature of the present invention as recited in independent claims 3 and 11, wherein the storage managing server performs first processing which is executed in response to a first request from said storage managing terminal, and second processing which is executed in response to a second request from said storage managing terminal, and includes the communication of constructional information of said storage device between said storage device and the storage managing server, and

a third feature of the present invention as recited in independent claim 7, wherein the storage managing terminal performs transmission processing for sending a first request to said storage managing server and a second request for executing processing which is executed in response to the second request to said storage managing server, and includes the communication of constructional information of said storage device between said storage device and said storage managing server, and said second transmission processing is performed in accordance with said first request before the response from said storage managing server is made.

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Further, the cited references fail to teach or suggest the above noted features of the present invention when taken in combination with other limitations recited in the claims.

The references considered most closely related to the claimed invention are briefly discussed below:

Meyer (U.S. Patent No. 5,392,398) shows a storage server receiving a plurality of messages from a client terminal and de-allocating the first message independently of the second message. (See, e.g., Abstract and FIGS. 1-10). However, unlike the present invention, Meyer does not include a storage managing server in a storage managing system, and the messages do not include a request for communication of constructional information.

More particularly, Meyer at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claims 3 and 11, and the above described third feature of the present invention as recited in independent claim 7, and further does not teach or suggest these features in combination with the other limitations recited in each of the claims.

Nolan (U.S. Patent No. 6,640,278) discloses a storage area network including a storage management system with a user interface functioning as a storage managing terminal. The user interface includes a dialog box for entering login information as well as management applications for requesting configurational information of the storage devices connected to the network.

(See, e.g., Abstract and FIG. 18.). In contrast to the present invention, Nolan do not teach the transmittal of a first request, such as for login, and a second request for communication of constructional information, with the processing of the second request before transmitting a response to the first request.

More particularly, Nolan at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claims 3 and 11, and the above described third feature of the present invention as recited in independent claim 7, and further does not teach or suggest these features in combination with the other limitations recited in each of the claims.

Chernock (U.S. Patent No. 6,772,209) discloses a storage network that allows aggregation of requests in order to save bandwidth utilization. (See, e.g., Abstract, column 8 lines 50-62, and column 12, lines 13-24). However, unlike the present invention, Chernock do not show a storage managing terminal and do not teach the queries to include constructional information or login data.

More particularly, Chernock at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claims 3 and 11, and the above described third feature of the present invention as recited in independent claim 7, and further does not teach or suggest these features in combination with the other limitations recited in each of the claims.

Kishimoto (U.S. Patent Application Publication No. 2003/0115347) shows a storage management server and a storage management terminal as a part of a storage area network wherein configurational information may be requested only after a user's login information is transmitted. (See, e.g., Abstract and FIGS. 1, 3, 4). Unlike the present invention, Kishimoto do not teach the start of the processing of the request for the configurational information before responding to the login information request.

More particularly, Kishimoto '347 at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claims 3 and 11, and the above described third feature of the present invention as recited in independent claim 7, and further does not teach or suggest these features in combination with the other limitations recited in each of the claims.

Wolrich (U.S. Patent Application Publication No. 2003/0115347) shows a network processor receiving two requests and commencing the processing of the second request prior to completion of processing the first request. (See, e.g., Abstract). However, unlike the present invention, Wolrich do not show the processor being part of a network storage system that includes a storage managing capability and the requests do not include configurational information or login data.

More particularly, Wolrich at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent

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claim 1, the above described second feature of the present invention as recited in independent claims 3 and 11, and the above described third feature of the present invention as recited in independent claim 7, and further does not teach or suggest these features in combination with the other limitations recited in each of the claims.

Baldwin (U.S. Patent Application Publication No. 2003/0167327) discloses a storage area network comprising a storage managing server connected to a storage device and a storage managing terminal. The storage managing terminal is able to issue requests regarding constructional information to the storage managing server. (See, e.g., Abstract and paragraphs [0114]-[0116]). In contrast to the present invention, Baldwin do not show the ability of the storage managing server to receive two requests from the storage managing terminal and process the second request before sending a response to the first request.

More particularly, Baldwin at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claims 3 and 11, and the above described third feature of the present invention as recited in independent claim 7, and further does not teach or suggest these features in combination with the other limitations recited in each of the claims.

Mogi (U.S. Patent Application Publication No. 2003/0229645) shows a storage area network including a storage managing server connected to a storage device and a storage managing terminal. The storage managing

terminal is able to send a request for configurational information to the storage managing server. (See, e.g., Abstract and FIGS. 1-17). In contrast to the present invention, Mogi do not disclose the transmittal of two requests or the transmittal of login information.

More particularly, Mogi at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claims 3 and 11, and the above described third feature of the present invention as recited in independent claim 7, and further does not teach or suggest these features in combination with the other limitations recited in each of the claims.

Bendich (U.S. Patent Application Publication No. 2004/0078461) shows a network including storage devices, a storage managing server, and a client terminal wherein a GUI is provided for an administrator to initiate requests from the client terminal. A multiple message package is formed including both query parameters for configurational information and database login IDs and encrypted passwords. (See, e.g., Abstract, FIGS. 3, 9, 10, and paragraphs [0091]-[0102]). However, in contrast to the present invention, Bendich do not disclose the processing of the second message before the first message; rather, they talk about using the same query request to perform multiple queries.

More particularly, Bendich at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in

independent claims 3 and 11, and the above described third feature of the present invention as recited in independent claim 7, and further does not teach or suggest these features in combination with the other limitations recited in each of the claims.

Kishimoto (U.S. Patent Application Publication No. 2004/0078583) discloses a terminal device connected to a service processor in a storage device wherein the terminal device transmits a command group to the service processor regarding constructional information of the storage device. The service processor has determining means to decide whether to execute the command prior to another command. (See, e.g., Abstract and FIG. 1). Unlike the present invention, Kishimoto do not disclose a separate storage managing server and do not disclose the storage managing server receiving a first request for executing processing of the storage managing server and a second request for executing processing including the communication of constructional information of a storage device.

More particularly, Kishimoto '583 at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claims 3 and 11, and the above described third feature of the present invention as recited in independent claim 7, and further does not teach or suggest these features in combination with the other limitations recited in each of the claims.

Yamagami (U.S. Patent Application Publication No. 2004/0128363) discloses a distributed storage network wherein a host is connected to a primary storage. A plurality of requests are sent to the primary storage system where a first request is selected from a queue based on priority. (See, e.g., Abstract and FIGS. 1-19). Unlike the present invention, Yamagami do not include in their storage system a storage managing server, and the requests that are sent are not for constructional information or login.

More particularly, Yamagami at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claims 3 and 11, and the above described third feature of the present invention as recited in independent claim 7, and further does not teach or suggest these features in combination with the other limitations recited in each of the claims.

Therefore, since the cited references at a minimum fail to teach or the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claims 3 and 11 and the above described third feature of the present invention as recited in independent claim 7, and further fail to teach or suggest these features of the present invention in combination with the other limitations recited in each of the independent claims, it is submitted that all of the claims are patentable over the cited references whether said references are taken individually or in combination with each other.

(F)   Conclusion

Applicant has conducted what it believes to be a reasonable search, but makes no representation that "better" or more relevant prior art does not exist. The United States Patent and Trademark Office is urged to conduct its own complete search of the prior art, and to thoroughly examine this application in view of the prior art cited herein and any other prior art that the United States Patent and Trademark Office may locate in its own independent search. Further, while Applicant has identified in good faith certain portions of each of the references listed herein in order to provide the requisite detailed discussion of how the claimed subject matter is patentable over the references, the United States Patent and Trademark Office should not limit its review to the identified portions but rather, is urged to review and consider the entirety of each reference, and not to rely solely on the identified portions when examining this application.

In view of the foregoing, Applicant requests that this Petition to Make Special be granted and that the application undergo the accelerated examination procedure set forth in MPEP 708.02 VIII.

(G)   Fee (37 C.F.R. 1.17(i))

The fee required by 37 C.F.R. § 1.17(i) is to be paid by:

[X]   the Credit Card Payment Form (attached) for $130.00.

[   ]   charging Account _____ the sum of $130.00.

A duplicate of this petition is attached.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (501.43611X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.

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